

Patent claims:

1. Automatic stripping pliers (100; 100'), in particular for flat cables, comprising of at least:
 - a knife unit (40), consisting of at least one knife holder (41) and a knife carriage (45) articulated on said knife holder;
 - a clamping arm unit (30; 30') with at least one clamping jaw (31) located at its front end;
 - a base housing (20) with
 - * one upper clamping arm (25; 25'), in which the knife unit (40) is guided in a movable fashion,
 - * at least one clamping jaw (21),
 - * one articulated clamping arm bearing (23; 23') on which the clamping arm unit (30, 30') is articulated;
 - a handle lever unit (60), which is articulated at an articulated handle lever bearing (61) with the base housing (20);

- an elbow lever unit (70) consisting of a first and a second elbow lever arm (72, 75) that are articulated relative to one another via an elbow lever center axis (73), whereby

* the first elbow lever arm (72) is guided with the first elbow lever end axis (71) in a guide link (32) of the clamping arm unit (30; 30'),

* the second elbow lever (75) is articulated at the knife unit (40)

and

* the elbow lever center axis (73) is guided in the handle lever unit (60).

2. Stripping pliers (100; 100') as set forth in claim 1, characterized in that the knife unit (40) is supported in a movable fashion in the clamping arm unit (30; 30').

3. Stripping pliers (100; 100') as set forth in claim 1 or 2, characterized in that the base housing (20) exhibits a hand grip section (24).

4. Stripping pliers (100; 100') as set forth in one of the claims 1 to 3, characterized in that the handle lever unit (60) exhibits at least one elbow lever axis guide groove (66), a spring element bearing (63) and a stop bolt (62).

5. Stripping pliers (100; 100') as set forth in claim 4, characterized by a stop element (50), which can be moved with the first elbow lever end axis (71) in relation to the clamping arm unit (30; 30') and that is to be resting on the stop bolt (62) with the stop surface (52).

6. Stripping pliers (100; 100') as set forth in claim 4 or 5, characterized in that the first elbow lever arm (72) with the first elbow lever end axis (71) is supported in a movable fashion in the elbow lever axis guide groove (34) of the clamping arm unit (30; 30').

7. Stripping pliers (100; 100') as set forth in one of the claims 1 to 6, characterized in that the elbow lever center axis (73) is guided in the elbow lever axis guide groove (66) of the handle lever unit (60).

8. Stripping pliers (100; 100') as set forth in one of the previous claims, characterized in that the knife holder (41) and/or the knife carriage (45) exhibits a U-shaped

cross-section at least in the area of the articulated axis (44) and whereby a cable feed-through channel is created between the knife carriage (45) and the knife holder (41).

9. Stripping pliers (100; 100') as set forth in one of the previous claims, characterized in that the elbow lever center axis (73) is supported in the elbow lever axis guide groove (66) in a rollable fashion via an elbow lever guide roll (74).

10. Stripping pliers (100; 100') as set forth in one of the previous claims, characterized in that the guide edge of the elbow lever axis guide groove (66) is thickened through a guide strip (65).

11. Stripping pliers (100; 100') as set forth in one of the previous claims, characterized in that the knife carriage (45) exhibits an elbow lever axis guide groove (47) across a portion of its length, which is at least partially covered by the elbow lever axis guide groove (34) of the clamping arm unit (30; 30').

12. Stripping pliers (100; 100') as set forth in one of the previous claims, characterized in that the clamping arm unit (30; 30') exhibits at its lower side a guide link (32)

on which the knife unit (40) is guided via a knife unit guide roll (49).

13. Stripping pliers (100; 100') as set forth in claim 12, characterized in that the guide link (32) exhibits at least one locking notch (33).

14. Stripping pliers (100; 100') as set forth in claim 12 or 13, characterized in that the knife unit guide roll (49) is supported at the spring receiving joint (48).

15. Stripping pliers (100; 100') as set forth in one of the previous claims, characterized in that the second elbow lever end axis (76) is located in the articulated axis (44) of the knife unit (40).

16. Stripping pliers (100; 100') as set forth in one of the previous claims, characterized in that the knife carriage (45) and/or the knife holder (41) is provided with replaceable knife elements (43, 46).

17. Stripping pliers (100; 100') as set forth in one of the previous claims, characterized in that the upper clamping arm (25) and/or the clamping arm unit (30; 30') is provided with replaceable clamping jaws (21, 31).

18. Stripping pliers (100; 100') as set forth in one of the previous claims, characterized in that a knife blade (92) is located at the handle lever unit (60), with said knife blade moving with a pivoting movement of the handle lever unit (60) against a fixed knife element (91) in the base housing (20).

19. Stripping pliers (100') as set forth in one of the previous claims, characterized in that the upper clamping arm (25') exhibits a pressure point element (26') that is guided in a pressure point element guide groove (27') and that is located opposite the upper end of the knife unit (40).

20. Stripping pliers (100') as set forth in one of the previous claims, characterized in that the articulated clamping arm bearing (23') is formed by an axis that is connected with the base housing (20') and that rests against a damping element (35') located in the clamping arm unit (30').

21. Stripping pliers (100') as set forth in claim 20, characterized in that the damping element (35') is located underneath the axis in an elongated hole (36') in the clamping arm unit (30').